

Introduction to Manufacturing (CIP: PTF13)

A. Problem Solving and Critical Thinking

- ☐ Solve problems and make decisions in work related situations
- ☐ Read for information and understanding
- ☐ Use observation skills to analyze work related situations
- ☐ Apply mathematical processes
- ☐ Apply measurement and special skills
- ☐ Apply statistical analysis skills
- ☐ Analyze critical data to guide work activities
- ☐ Utilize scheduling techniques to ensure jobs are completed by the stated due date
- ☐ Demonstrate knowledge of the economy and how it functions as a whole
- ☐ Demonstrate knowledge of the economy as a framework within which decisions are made by individuals and groups

B. Apply Technology

- ☐ Demonstrate technological literacy
- ☐ Access/Transmit information using electronic communication systems
- ☐ Demonstrate computer literacy
- ☐ Use database software in work related situations
- ☐ Use spreadsheet software in work related situations
- ☐ Use word processing software in work related situations

C. Communicate Effectively

- ☐ Apply basic communication skills
- ☐ Apply oral communication skills
- ☐ Apply written communication skills
- ☐ Apply technical writing skills
- ☐ Apply listening skills
- ☐ Apply presentation / demonstration skills
- ☐ Apply graphic communication skills
- ☐ Apply artistic communication skills
- ☐ Convey information through multimedia presentations
- ☐ Create graphs and charts
- ☐ Build interpersonal relationships

D. Manage Resources (Health and Environmental)

- ☐ Apply self management processes in the workplace
- ☐ Use reference materials to obtain information appropriate to a given problem, topic or situation
- ☐ Maintain and promote wellness
- ☐ Determine the impact of government regulations and business/industry procedures on the performance of particular work functions
- ☐ Implement safety procedures and programs
- ☐ Support the provision of first aid in accordance with company policy and procedures
- ☐ Manage work and family responsibilities for the well being of self and others
- ☐ Determine resources needed to produce a given product or provide a given service
- ☐ Ensure the quality of products and services
- ☐ Utilize an inventory control system to track supplies, materials, and equipment
- ☐ Make informed financial decisions

E. Work Effectively and Responsibly

- ☐ Demonstrate leadership
- ☐ Contribute to teamwork

- ☐ Demonstrate responsibility for learning
- ☐ Choose ethical courses of action on all work assignments and personal interactions
- ☐ Demonstrate the work ethic
- ☐ Comply with confidentiality requirements of workplace policies and procedures
- ☐ Apply appropriate strategies for dealing with the differences associated with diversity (e.g. : racial, ethnic, gender, educational, personality, social, and age)

F. Demonstrate employability and Manage a Career

- ☐ Identify how personal interests, abilities, and skills relate to choosing a career
- ☐ Chart career and career planning skills
- ☐ Demonstrate skills needed to enter or reenter the workforce
- ☐ Demonstrate job keeping skills
- ☐ Upgrade career skills
- ☐ Explore opportunities to create a business

G. Demonstrate an Understanding of Academic Connections to Core Pre-Tech Foundational Competencies (CPFC)

H. Demonstrate an Understanding of the Manufacturing Career Cluster

- ☐ Identify the four areas of the Manufacturing Career Cluster
- ☐ Identify which area a specific job falls under

I. Demonstrate Technical Skills within the Manufacturing Career Cluster

- ☐ Safety
- ☐ Applied Math and Measurement
- ☐ Print Reading
- ☐ Metallurgy
- ☐ Hand, Bench, and Portable Power Tools
- ☐ Abrasive and Grinding Technology
- ☐ Turning Technology
- ☐ Milling Technology
- ☐ Sawing Technology
- ☐ Drilling Technology
- ☐ Assembly and Fabrication
- ☐ Computer Numerical Control